

NWSTC Remote Training Module

# RTM600 COOPERATIVE PROGRAMS OVERVIEW QUESTIONS



JAN 2004 Revision

National Weather Service  
Training Center  
Kansas City, MO 64124

## Item 5

### RTM600 Review Questions

These 70 questions reference National Weather Service Instructions (NWSI). RTM 600 review questions (item 5) are divided into 4 parts corresponding to the referenced NWSI. Page 8 is an RTM600 completion certificate which must be faxed back to the NWSTC.

#### **PART 1 - COOPERATIVE STATION MANAGEMENT**

1. The authority for the establishment of the Cooperative Weather Observing Program was established in the \_\_\_\_\_ of \_\_\_\_\_.
2. The mission of the NWS Cooperative Weather Observing Program is two-fold. They are:
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
3. The Cooperative Program is the means by which the NWS obtains observational data to support the \_\_\_\_\_ program and \_\_\_\_\_.
4. The COOP program includes:
  - a.) the selection of data sites.
  - b.) recruiting, appointing and training of observers.
  - c.) \_\_\_\_\_ and \_\_\_\_\_ of equipment.
  - d.) Station \_\_\_\_\_.
  - e.) Data Quality Control
  - f.) Management of both fiscal and \_\_\_\_\_ resources.
5. NWS Cooperative Weather Observers \_\_\_\_\_ required to take or pass observation certification examinations.
6. A Cooperative Weather Station \_\_\_\_\_ be collocated with other types of observing stations.
7. Cooperative Weather observers may serve on either a paid or unpaid basis, depending on \_\_\_\_\_ and \_\_\_\_\_.
8. Equipment used at NWS Cooperative Stations may be owned by the NWS, the Cooperative Observer, or by a company or other government agency, as long as it \_\_\_\_\_ as documented in NWSI 10-1302.

9. A Cooperative Weather Station will be considered “official” and will be included in the cooperative network when it has been duly approved and meets these 3 criteria. They are:
- a. Equipment used for observations is \_\_\_\_\_.
  - b. The station is documented in the \_\_\_\_\_ data base.
  - c. The station is assigned a \_\_\_\_\_ by \_\_\_\_\_, a \_\_\_\_\_ by the NWS Office of Operational Systems,...requested through the \_\_\_\_\_ system data base.
10. The \_\_\_\_\_ establishes National Policy and provides guidelines for program management in areas \_\_\_\_\_ to all regions.
11. The \_\_\_\_\_, in coordination with other offices, is responsible for determining overall requirements for the \_\_\_\_\_ and \_\_\_\_\_ of measurements, the \_\_\_\_\_ with which observations should be reported, and the \_\_\_\_\_ of observing sites in the Climatological network.
12. \_\_\_\_\_ determines the requirements to establish, change, or close observing sites.
13. OCWWS coordinates program activity and establishes procedures to \_\_\_\_\_ of the cooperative program networks and to assure the networks continue to \_\_\_\_\_ for which they were established.
14. The \_\_\_\_\_ has nationwide responsibility to establish and maintain \_\_\_\_\_ to support the cooperative station management program at WSH.
15. \_\_\_\_\_ implements national policy. They can also \_\_\_\_\_ national policies and procedures with additional details.
16. \_\_\_\_\_ are also responsible for obtaining \_\_\_\_\_ from other government agencies and assuring that these funds are \_\_\_\_\_.
17. The NWSREP may work out of a WFO, WSO, or DCO and is responsible for the \_\_\_\_\_ and \_\_\_\_\_ of cooperative station equipment
18. At times, NWS officials such as a) \_\_\_\_\_, b) \_\_\_\_\_, c) \_\_\_\_\_, d) \_\_\_\_\_, e) \_\_\_\_\_ and others may perform functions or be assigned responsibilities within the scope of the cooperative program and are considered an \_\_\_\_\_.

19. Duties of the NWSREP include:
- \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
20. Other duties of the NWSREP include \_\_\_\_\_ and \_\_\_\_\_ maintenance of assigned COOP equipment.
21. \_\_\_\_\_ visits to cooperative stations are made for the purpose of observer training, equipment maintenance, and verification of \_\_\_\_\_.
22. Temperature and non recording precipitation stations are visited on an \_\_\_\_\_ basis. Other stations, such as those that measure evaporation and those with recording rain gauges are visited \_\_\_\_\_.
23. NWSREPs should prepare all forms required or furnish adequate notes, sketches, and diagrams within \_\_\_\_\_ of any change.
24. The \_\_\_\_\_ network is the basic climatic network of the NWS. Data from this network are used to \_\_\_\_\_ of the United States. Most stations in this network observe 24 hour \_\_\_\_\_ and 24 hour \_\_\_\_\_ totals.
25. In general, "a" network stations should be spaced approximately \_\_\_\_\_ miles apart. This ideal spacing authorizes at least one "a" network station every 400 square miles.
26. Cooperative stations are placed in the \_\_\_\_\_ network when observed data are used to support NWS hydrologic programs. Stations are established, changed, or closed to meet changing hydrologic needs that have been defined by \_\_\_\_\_ and verified by \_\_\_\_\_.
27. Cooperative stations are placed in the \_\_\_\_\_ network when observed data are used to support the \_\_\_\_\_ forecast, warning and public service programs of the NWS. The 3 general classes of "c" network stations include  
a) \_\_\_\_\_ b) \_\_\_\_\_ c) \_\_\_\_\_.
28. Stations belonging to other agencies (federal or state), but serviced by the NWS, are known as \_\_\_\_\_ stations. The costs of \_\_\_\_\_ and \_\_\_\_\_ of these stations are reimbursed to the NWS by the government agency served.

29. The authority to add, change, or close stations is assigned to the Chief of the \_\_\_\_\_ or the \_\_\_\_\_ (or equivalent for Pacific and Alaska Regions) at the Regional Headquarters.
30. The \_\_\_\_\_ network consists of cooperative stations with recording precipitation gauges for which the NWS has taken over funding and maintenance from the U.S. Army Corps of Engineers. All FC stations are placed in the \_\_\_\_\_ network.
31. The Closure of stations in FC networks should be coordinated with the applicable \_\_\_\_\_. The closure of stations sponsored by a reimbursable agency should be coordinated with \_\_\_\_\_.
32. Part-time stations established for short periods or on a part-of-the-year basis to fill the needs of special programs will not be considered as a part of the \_\_\_\_\_ network.
33. The \_\_\_\_\_ is a computerized national data base containing descriptions of the cooperative stations maintained by the NWSREP
34. In general, NCDC will publish data from \_\_\_\_\_ cooperative stations whenever the region has indicated a requirement to do so and the station meets the establish criteria...
35. \_\_\_\_\_ the most important tasks of the NWSREP is assuring observations are recorded and reported \_\_\_\_\_ and data are received promptly by users.
36. NWSREP visits, phone calls to observers, awards, and seeing their observations in print, are all forms of \_\_\_\_\_.
37. Awards are very important in the cooperative observing program. They may be given to observers for \_\_\_\_\_ or \_\_\_\_\_.

## **Part 2 - VISITATION PROCEDURES - COOPERATIVE STATIONS**

38. NWSI 10-1309 provides a common guide for the inspections of COOP stations and established \_\_\_\_\_ for the national program.
39. It is the goal of the cooperative station inspection program to \_\_\_\_\_ of these COOP stations and to \_\_\_\_\_ by the observers.
40. \_\_\_\_\_ to cooperative stations are made for the purpose of observer training, equipment maintenance, and \_\_\_\_\_.

41. A times, NWS officials such as Service Hydrologists, Interns, Electronic Technicians, Facilities Technicians, RH personnel, and others \_\_\_\_\_ or \_\_\_\_\_ within the scope of the COOP and are considered an NWSREP.
42. The NWSREP is responsible for the \_\_\_\_\_ of the cooperative stations within their assigned areas.
43. The NWSREP, in coordination with the \_\_\_\_\_, will determine the best sites for COOP stations with respect to location, exposure, and availability of COOP observers.
44. The NWSREP must document the COOP site and exposures by collecting the required metadata and entering the information into the \_\_\_\_\_.
45. Some items to consider when selecting COOP observers are:
- a) \_\_\_\_\_
  - b) \_\_\_\_\_
  - c) \_\_\_\_\_
  - d) \_\_\_\_\_
  - e) \_\_\_\_\_
46. Once a selection is made for a new Cooperative Weather Observer, the NWSREP should \_\_\_\_\_. Otherwise, a new observer may wish to resign because they are confused and feel they can't do the work.
47. The NWSREP trains the Cooperative Observers in \_\_\_\_\_ observations. He/she remains with the new observer to demonstrate proper procedures until satisfied the new observer is \_\_\_\_\_.
48. The NWSREP has the responsibility for \_\_\_\_\_ of cooperative station records. Probably the most helpful tool is the \_\_\_\_\_ with an observer when their procedures and records can be examined and an effort made to correct problems.
49. The NWSREP should prepare and \_\_\_\_\_ routine cooperative station inspection reports.
50. The "Visitation Mission"- because of the infrequency of visits, should be complete

and thorough in itself, insofar as possible, for \_\_\_\_\_ for the operation of the station.

51. In a large measure, the success of the COOP program depends on the \_\_\_\_\_ and \_\_\_\_\_ of the single, multi-purpose visit.

### Part 3 - INSTRUMENT REQUIREMENTS AND STANDARDS...

52. Instrument standards are for sensor resolution, accuracy, siting and \_\_\_\_\_. If standards can not be met by equipment in place, the standards should be achieved as stations are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, or new stations are established.
53. *Referencing 2.4 Climatic Observing Program*, The accuracy and resolution standards of all sensors used in climate (i.e., Cooperative "a" network) observations support the recommendations of the \_\_\_\_\_. Appendix \_\_\_\_\_ contains a listing of climatic observing program instrument requirements and standards.
54. *Referencing Appendix D*, there are three temperature sensors used in the climate observing program. They are:  
a) \_\_\_\_\_  
b) \_\_\_\_\_  
c) \_\_\_\_\_
55. *Referencing Appendix D*, the temperature accuracy standard for temperature in the range of -50F to +122F is \_\_\_\_\_ degree(s).
56. *Referencing Appendix D*, All NWS staffed or managed climate observation station providing precipitation measurements will have a \_\_\_\_\_ that meets the performance standards.
57. *Referencing Appendix D*, the standard accuracy requirement for a liquid precipitation rain gauge is plus or minus \_\_\_\_\_ inches or \_\_\_\_\_ percent of hourly among (whichever is greater).
58. *Referencing Appendix E*, Air temperature sensors siting standards require that the sensor be over level terrain typical of the area around the station, and; at least \_\_\_\_\_ feet from any extensive concrete or paved surface. If the sensor is within an instrument shelter, position the shelter so that the door opens to the \_\_\_\_\_ with the floor of the shelter \_\_\_\_\_ above the surface.
59. *Referencing Appendix E*, Instrument shelters should be located no closer to an obstruction than \_\_\_\_\_ times the height of the obstruction.

60. Referencing Appendix E, An object will be considered an obstruction if the object is greater than \_\_\_\_ degrees in horizontal width as measured from the sensor and within \_\_\_\_\_ feet of the sensor.
61. Referencing Appendix E, the orifice (opening) of a precipitation gage will be horizontal (level) and \_\_\_\_\_ feet above the surface.
62. Referencing Appendix E, Sensors \_\_\_\_\_ be located on rooftops.

#### **Part 4 CLAIMS FOR ON-THE-JOB INJURIES TO...COOPERATIVE OBSERVERS**

63. The Federal Employees' Compensation Act provides compensation and medical care for all civil officers and employees of all branches of Federal Government for disability due to \_\_\_\_\_.
64. The law also provides for the \_\_\_\_\_ and \_\_\_\_\_ if the injury or disease causes the employee's death.
65. Individual observers in the National Weather Service (A\_Paid) or Cooperative Observer Program (COOP) may be considered by the NWS as \_\_\_\_\_ under the Federal Employees' Compensation Act while engaged in observation work \_\_\_\_\_.
66. Final determination as to a Coop Observer's eligibility and extent of coverage under the Act rests with the \_\_\_\_\_, U.S. Dept of Labor.
67. The NWS \_\_\_\_\_ covers the procedures and instructions to follow for an accident or incident resulting in a occupational injury or illness. This manual contains the primary forms used in submitting claims.
68. The NWSREP or the Regional Cooperative Program Manager will be expected to provide considerable assistance to the observer, including \_\_\_\_\_.
69. In the context of an employee/supervisor relationship, the supervising office's \_\_\_\_\_ is considered the "supervisor" of either the contract or cooperative observer.
70. Forms CA-1 should be filed within \_\_\_\_\_ of an injury to a cooperative observer. Form CA-2 should be filed within \_\_\_\_\_ days of the date the observer realized the disease or illness was caused or aggravated.



**Attachment A**  
**COOPERATIVE NETWORK OPERATIONS**  
**RTM 600 COMPLETION CERTIFICATION**

Be advised the \_\_\_\_\_ has submitted a completed copy of RTM600 for my review.

I have reviewed the completed RTM and am satisfied that this employee should be given credit for completion.

**Signed:** \_\_\_\_\_  
**Title:** \_\_\_\_\_

**Please fax this completion certificate to the National Weather Service Training Center at:**

816 880-0377

NWSTC must receive this certificate before this employee will be credited with completion in the NWSTC's RTM database.